

### Remarks

Claims 1-3 and 13 are pending in the application.

The Applicant appreciates the Examiner's suggestion to retain a registered patent attorney. Applicant has informally consulted a registered patent attorney in formulating this Response.

Claims 2, 3 and 13 have been rejected under 35 U.S.C. 112, first paragraph. It is believed the amendments to claims 2, 3 and 13 suffice to overcome this rejection.

Claim 1 has been rejected under 35 U.S.C. 112, second paragraph. It is believed the amendments to claim 1 suffice to overcome this rejection.

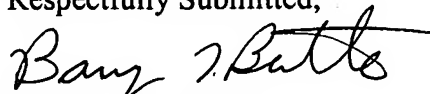
Claim 1 has been rejected under 35 U.S.C. 102(b) over U.S. Patent No. 3,661,202 to Moore ("Moore"). This rejection is respectfully traversed as follows. Moore does not teach or suggest all the elements of independent claim 1. Specifically, Moore does not disclose a solar heat transfer system configured to accommodate fluid thermal expansion and contraction in a heat transfer loop by allowing fluid to enter and leave the system, nor does Moore disclose displacing air in the loop with fluid, as recited in claim 1. Rather, the system of Moore is hermetically sealed so fluid cannot enter or leave the system, and fluid cannot be used to displace air. For at least these reasons, it is respectfully submitted that independent claim 1 and any claim that depends there from is patentable over Moore.

Claims 2, 3 and 13 have been rejected under 35 U.S.C. 102(b) as unpatentable over U.S. Patent No. 4,360,003 to Hardy ("Hardy"). This rejection is respectfully traversed as follows. Hardy does not teach or suggest all of the elements of claims 2, 3 and 13. Specifically, Hardy does not disclose an overflow/recovery reservoir such that fluid flowing from his pressurized loop (62) through a one-way out pressure relief valve to an overflow/recovery

reservoir, and replacement fluid drawn through a one-way in vacuum fluid recovery valve from the overflow/recovery reservoir into a gas condensing assembly or a heat transfer loop system, as recited in independent claims 2 and 3, respectively. To the extent Hardy discloses a reservoir, it is not an overflow/recovery reservoir because it is not connected in any way to the heat transfer loop (72). In Hardy' reservoir (36) has an overflow such that a high fluid level causes fluid to be discarded through a pipe and a suitable drain, and replacement water from a float valve (see Fig. 3 of Hardy). Also, to the extent Hardy discloses relief valves, those valves emit fluid into the atmosphere, not into a reservoir that can be used to store and replace the fluid. For at least these reasons, it is respectfully submitted that claims 2 and 3 (and 13, which depends from 2 and 3) are patentable over Hardy.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully Submitted,

  
Dr. Barry L. Butler